

## Sedgwick County

### Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

5/24/2016

Using the most recent IMPLAN data available (2014) adjusted for 2016, 36 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Sedgwick County economy.<sup>1</sup>

These 36 sectors have a total direct output of approximately **\$1.7 billion** and support **6,237.2 jobs** in Sedgwick County. Running the model for all 36 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Sedgwick County Economy						
Impact Type <sup>2</sup>	Employment	% Employment	Total Value Added <sup>3</sup>	Total Value Added % of Gross Regional Product <sup>4</sup>	Output <sup>5</sup>	Output % of Gross Regional Product
Direct Effect	6,237.2	1.97%	\$432,109,535.24	1.70%	\$1,674,762,696.04	6.58%
Indirect Effect	1,668.5	0.53%	\$185,647,442.54	0.73%	\$318,593,205.03	1.25%
Induced Effect	2,238.7	0.71%	\$167,242,703.93	0.66%	\$291,442,087.23	1.14%
<b>Total Effect</b>	<b>10,144.5</b>	<b>3.20%</b>	<b>\$784,999,681.71</b>	<b>3.08%</b>	<b>\$2,284,797,988.30</b>	<b>8.98%</b>

As shown in the above table, agriculture, food, and food processing sectors support **10,144.5 jobs**, or **3.2%** of the entire workforce in the county. These sectors provide a total economic contribution of approximately **\$2.3 billion**, roughly **8.98% of the economy**.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 36 agriculture, food, and food processing sectors is approximately **\$785 million**, or **3.08% of the GRP**. This indicates that personal income, business income, and taxes generated by these sectors account for **3.08% of the total economy**.

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

<sup>1</sup> Article on building a contribution analysis in IMPLAN that avoids double counting:

[http://www.implan.com/index.php?option=com\\_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70](http://www.implan.com/index.php?option=com_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70)

<sup>2</sup> Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

<sup>3</sup> Value added = labor income + indirect business taxes + other property type income.

<sup>4</sup> GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

<sup>5</sup> Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the landscape and horticultural services sector is the top employer with **1,487.7 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Sedgwick County.

Top Ten Sectors by Employment		
Sector	Total Employment	Total Output
Landscape and horticultural services	1487.7	\$88,078,626.57
Meat processed from carcasses	1214.7	\$621,170,363.14
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	633.3	\$37,375,038.07
Veterinary services	579.2	\$56,078,330.34
All other industrial machinery manufacturing	475.6	\$130,617,760.06
Bread and bakery product, except frozen, manufacturing	395.9	\$49,058,744.36
Grain farming	343.5	\$68,389,261.72
Wholesale trade	325.1	\$78,384,147.19
Full-service restaurants	176.7	\$8,478,095.93
Limited-service restaurants	168.7	\$13,720,296.09

The meat processed from carcasses sector directly contributes approximately **\$621.2 million** to the Sedgwick County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry..

Top Ten Sectors by Output		
Sector	Total Employment	Total Output
Meat processed from carcasses	1214.7	\$621,170,363.14
Flour milling	85.1	\$132,764,828.66
All other industrial machinery manufacturing	475.6	\$130,617,760.06
Landscape and horticultural services	1487.7	\$88,078,626.57
Wholesale trade	325.1	\$78,384,147.19
Grain farming	343.5	\$68,389,261.72
Fluid milk manufacturing	84.7	\$64,777,134.32
Animal, except poultry, slaughtering	76.1	\$59,817,159.10
Bottled and canned soft drinks & water	76.3	\$59,671,331.82
Veterinary services	579.2	\$56,078,330.34

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Sedgwick County economy.

<b>All Agriculture, Food, and Food Processing Sectors</b>		
<b>Sector</b>	<b>Total Employment</b>	<b>Total Output</b>
Oilseed farming	43.3	\$26,717,869.73
Grain farming	343.5	\$68,389,261.72
Vegetable and melon farming	1.0	\$171,790.80
Fruit farming	4.5	\$328,299.71
Tree nut farming	0.0	\$6,436.74
Greenhouse, nursery, and floriculture production	16.0	\$2,020,815.20
Cotton farming	0.7	\$129,835.73
All other crop farming	127.9	\$5,372,253.13
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	633.3	\$37,375,038.07
Dairy cattle and milk production	32.6	\$9,095,291.12
Poultry and egg production	0.4	\$220,592.39
Animal production, except cattle and poultry and eggs	30.6	\$1,910,409.33
Commercial logging	5.0	\$1,075,511.13
Flour milling	85.1	\$132,764,828.66
Confectionery manufacturing from purchased chocolate	11.3	\$3,179,843.07
Canned fruits and vegetables manufacturing	61.5	\$32,272,230.26
Dehydrated food products manufacturing	65.2	\$30,596,512.05
Fluid milk manufacturing	84.7	\$64,777,134.32
Animal, except poultry, slaughtering	76.1	\$59,817,159.10
Meat processed from carcasses	1214.7	\$621,170,363.14
Poultry processing	12.6	\$3,810,954.90
Bread and bakery product, except frozen, manufacturing	395.9	\$49,058,744.36
Frozen cakes and other pastries manufacturing	19.1	\$2,865,931.87
Dry pasta, mixes, and dough manufacturing	73.6	\$48,158,758.13
Tortilla manufacturing	3.7	\$672,581.29
Coffee and tea manufacturing	49.3	\$29,015,058.13
Spice and extract manufacturing	40.5	\$20,674,689.97
All other food manufacturing	81.8	\$27,707,809.08
Bottled and canned soft drinks & water	76.3	\$59,671,331.82
Breweries	15.7	\$12,613,990.32

Farm machinery and equipment manufacturing	59.5	\$34,656,134.21
Lawn and garden equipment manufacturing	23.2	\$12,166,237.36
Food product machinery manufacturing	6.2	\$1,524,282.25
All other industrial machinery manufacturing	475.6	\$130,617,760.06
Veterinary services	579.2	\$56,078,330.34
Landscape and horticultural services	1487.7	\$88,078,626.57

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Sedgwick County, the retail sector was omitted.